

Hunting as a Moral Good

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Contemporary hunting is commonly condemned in ethical literature as: (a) the killing of animals for sport; (b) by cruel means that cause excessive suffering; (c) thereby immorally violating our obligations to honour animals' rights or intrinsic goods; (d) whose only practical benefit, i.e. nutrition, is achievable without killing animals, i.e. agriculture; and (e) whose practice embodies no redeeming virtues. I will argue that each of these clauses is dubious or false regarding most contemporary legal hunting in the United States. I leave open whether other types of hunting, or meat-eating, are permissible, as well as what overall ethical theory is most justifiable. In what follows we will discuss ecological ethics versus animal rights and animal welfare ethics (section one), the nature of hunting as currently practised (sections two and three), the relative harms to wildlife of hunting and farming (section four), and some possible virtues of hunting practice (section five).¹

I. WHICH ETHICS APPLIES?

Most current arguments against hunting are based in either the utilitarian animal welfare perspective, which aims to maximize the welfare and minimize the pain of sentient beings, or the deontological animal rights perspective, which endows animals with rights not to be intentionally harmed. The most famous formulators of these views are, respectively, Peter Singer and Tom Regan (Singer 2002a, Regan 1983). The crucial point for each theory is the ascription to individual animals of a morally considerable value comparable, but not equivalent, to that of individual humans, so that any human activity that harms them requires a moral justification in terms of countervailing human rights or interests, i.e., that the activity is truly necessary or achieves a greater good. Each restricts his claim to only some animals; for Singer, those that can suffer, which he claims for mammals and birds, suggests in reptiles and fish, and considers possible in crustaceans and mollusks; for Regan, those that apprehend their identity and

welfare, hence are the 'subject of a life', a capacity he describes only in mammals, although he suggests that killing birds and fish is also wrong. Both take killing such animals for food to be unnecessary, hence immoral. This naturally makes what is called sport hunting, although perhaps not subsistence hunting, immoral.

The animal rights/welfare views apply to animals, including wild animals, a modern human ethics of equality of individual rights and interests in the traditions of Immanuel Kant and Jeremy Bentham. Callicott famously argued in a 1980 essay that such an ethics cannot be employed by environmentalists (Callicott 1980). Almost ten years later, he softened his claim to say that a modified animal rights/welfare view could be compatible with ecological ethics (Callicott 1988). Others have likewise attempted a *rapprochement* (e.g. Jamieson 1998, Varner 2003 and Callicott 1998). Callicott the first and Callicott the second were both surely right: the two ethics have distinctive principles yet both their hopes and conclusions overlap. Ecological ethics joins Singer and Regan in finding morally relevant value outside human society, and in ascribing to individual animals goods that potentially generate moral obligations. But they also diverge. Unlike the animal rights/welfare views, ecological ethics must hold that: the ecosystem, on which all members depend, and the species-roles in that ecosystem, are more valuable than the individuals occupying them; the good of a complex organism, e.g. its ability to feel pain or be a 'subject' of its life, can be trumped by the ecosystem role of less complex organisms, including vegetation and terrain or aquatic ecosystem features; wildness, as opposed to domestication, is a good; and even death, as the transfer of chemical energy among organisms, can be a good. Ecology recognizes that organisms live at each other's expense. Not only predators, but scavengers, fungi, fruit-eating animals and autotrophs (e.g. green plants), eliminate competitors by monopolising resources. They may not kill to eat but their eating kills. Ecological ethics recognizes that this is good; for the good of the ecosystem, maintained by those individual goods and ills,

trumps them all. However else ecological ethics differs from animal rights/welfare views, it differs in accepting a kind of holism.²

The ecologically most troublesome implication of the strong or ‘canonical’ animal rights/welfare views is that predation, which plays a crucial ecosystem role in limiting expansionist species which otherwise would overwhelm resources, is an evil. Some animal advocates make this explicit, for example Cleveland Amory and Matthew Scully (Nelson 1997: 275; Scully 2002: 318). Regan and Singer have denied that their views condemn predation, arguing that predators are not blameworthy (Regan 1983: 357; Singer 2002a: 224–6). Those replies were true but irrelevant. An event can be an evil even if no agent is blameworthy for it. We would be obliged to try to save animals from blameless predators as from blameless floods and fires. Other attempts at immunizing the canonical animal rights/welfare principles from this implication fare no better. The claim that such principles make predation only a *prima facie* evil, an evil for the prey and not an evil simpliciter that ought to affect policy, sunders the relation between that evil for and human policy – a relation the animal rights/welfare views need to maintain. That is, if an evil for an animal, like being eaten, does not generate an implication for what non-humans should be allowed to do, why should it generate implications for what humans should be allowed to do? Likewise, understanding animals’ putative rights as purely negative does not abrogate our responsibility to interfere with predation, since negative rights not to be harmed or interfered with do generate third-party obligations to act, e.g. to stop or punish rights-violators. Although we can certainly have a moral theory prohibiting human harm to animals, it cannot justify its conclusion by ascribing an intrinsically harm-prohibiting trait to the animal itself, i.e. a right. For the violation of such a trait is not dependent on the nature of the violator or ecosystem circumstances – hence it makes predation an evil. Even when softening his critique of animal rights/welfare views, Callicott reiterated: ‘Among the most disturbing implications drawn from conventional indiscriminate animal liberation/rights theory is that, were it possible for us to do so, we ought to protect innocent vegetarian animals from their carnivorous predators. Nothing could be more contrary to the ethics of the biotic community’ (Callicott 1989: 57). In practice, of course, animal rights/welfare theories are concerned not with the rights, interests, or suffering of animals per se, but with humanly caused pain and rights-violations, with ‘the evil that men do’. They demand that human activities that harm animals be justified before an ethical bar that honours the value of each animal. Ecological ethics can agree. This concern could be captured by a meliorist, secondary principle that would not condemn predation, namely, that humanly caused animal death and suffering

should be reduced as much as possible, hence allowed only if necessary. ‘Necessary’ must refer to goods of ecosystems, or human goods or rights, sufficient to justify the animal death or harm. How this principle is to be grounded we can leave open for present purposes.

It is reasonable to ask if hunting can justify itself with respect to this meliorist principle. Its fundamental argument against hunting would be: harming or killing animals unnecessarily is wrong; hunting kills animals unnecessarily; so hunting is wrong. Note the major premise is potentially a charge against all animal-killing activities, while the minor premise singles out hunting for lack of ‘necessity’. That implies the existence of alternative activities which accomplish any goods or benefits ascribed to hunting without killing animals. Before addressing this basic charge we have to clarify the nature of contemporary hunting and address less fundamental criticisms made against it.

II. IS CONTEMPORARY HUNTING A SPORT?

Most anti-hunting criticisms distinguish sport hunting from the subsistence hunting of indigenous peoples, and some accept the latter if a people inhabit a traditional hunting culture and must hunt to live.³ Such hunters can plausibly claim natural necessity: sport may be cultural, but starvation is awfully natural. The condemnation of a sport of killing is presumably less difficult. Not much of a sport, Camilla Fox says, since sport ‘implies two players on an equal playing field’, whereas the only equality in hunting is, according to Joy Williams, ‘Bam, bam, bam. I get to shoot you and you get to be dead’ (Fox 2002: 2; Williams 1995: 248). One can understand the judgment of sport killing as a paradigmatic form of cruelty, ‘the perfect type of that pure evil for which metaphysicians have sometimes sought’, according to Joseph Wood Krutch (1957).

Holmes Rolston and Ned Hettinger have separately argued that while hunting would be immoral under a human social morality, that is the wrong morality to apply to relations with wild animals (Rolston 1988; Hettinger 1994). Since hunting is continuous with the natural process of non-human predation, the right morality to apply is the ecological ethics of preserving ecosystems. In contrast, Paul Veatch Moriarity and Mark Woods insist that hunting is not comparable to animal predation. They write, ‘There is nothing natural about meat-eating and hunting in our culture. Meat-eating and hunting are cultural activities, not natural activities’ (Moriarity and Woods 1997: 399). While subsistence hunters might be considered part of a natural or ecological morality, contemporary American hunters are sportsmen, engaged in a cultural activity that pretends to be natural so as to take a moral holiday.

But what makes a subsistence hunter? There are rural

American families who depend on the 120 pounds of venison from two deer for the price of a \$30 hunting license. There are even non-Native Americans who 'subsist' on hunting and fishing in the sense of providing for themselves and their families nearly all the meat, and a high percentage of the protein and calories, eaten year round. Are they subsistence hunters? No, they could eat otherwise, the answer comes. But what lifestyle cost is plausible as the price of that 'could'? Inuit living in the Arctic 'could' work on oil pipelines and import soy protein, or just move to warmer climes. Some anti-hunters who countenance indigenous hunters grant them a moral right to hunt out of cultural or political, not biological, necessity. Perhaps this is reasonable. But now hunting, which we were told is immoral for Americans because 'cultural' and not 'natural', is claimed legitimate for cultural reasons. What of the rural American who inhabits a local hunting culture? There is a difference, we are told. Even if so, can the difference support the moral dichotomy between 'subsistence' and 'sport' hunting?

The 'sport' appellation has its own varied history. In America its mantle was donned by wealthy hunters as a class distinction to mark themselves off from rural 'pot' hunters (List 2004).⁴ In the central European or Germanic tradition hunters were never considered sportsmen, but woodsmen, pliers of the forest trades and conservators of its bounty. Contemporary American hunting ethics dictates that prey must be eaten, and an activity whose end is the provision of necessity cannot be a sport. As Fox correctly stated, sport implies equal contenders, but as José Ortega y Gasset pointed out, predator and prey cannot be equals, they must belong to sufficiently dissimilar species bearing a definite venatic relationship (Ortega 1972). The challenge is not who 'wins' but whether predator can defeat the wiles of prey. The 'sporting' aspect of contemporary hunting is 'fair chase', the renunciation of technical advantages that would negate the prey's strategies of avoidance. This self-imposed limitation does sound like sport, and it is something we perhaps cannot ask of the subsistence hunter, that she sacrifice her child's dinner to fair chase. However, as Charles List points out, indigenous hunting contains many such ethical or ritual rules, fealty to which is crucial to the hunter's social status (List 2004). Thus, even this one apparently distinctive feature of 'sport' hunting does not clearly distinguish it from 'subsistence' hunting. Whatever else may be said, we see here a continuum rather than a rigid dichotomy.

Now, the claim of Moriarity and Woods that there is 'nothing' natural about contemporary hunting is too strong. One might as well say there is nothing natural about human digestion. But we may accept that no human practice, including hunting, is devoid of culture. So is contemporary hunting cultural or natural? The obvious answer is that it is both. The anti-hunters are right:

contemporary hunting is not a sport. It is a cultural trophic practice.⁵ Traditional hunting was a cultured form of food acquisition. Many millennia down the road from her hunter-gatherer origins, now an agro-industrialist, for cultural reasons the human creature elects selectively to strip herself of features of modernity to effect a limited re-occupation of our phylogenetic and archaic niche in wild nature. That means hunting for meat. As Rolston puts it, 'Mere killing for sport is not justified but must join its ancient function ... the quarry should not be sacrificed outside the paradigm of meat-hunting ...' (Rolston 1988: 89). If in indigenous societies hunting is a traditional trophic practice, then in contemporary America hunting is a neo-traditional trophic practice whereby agro-industrialists elect to approximate the pre-agrarian skill of procuring meat by taking individual wild prey. This is no pretended primitivism, but a practical approximation of an archaic activity.⁶ Whether it is a morally permissible practice, of course, remains to be seen.

III. THE PRACTICE OF CONTEMPORARY HUNTING

Hunting practice is unfamiliar to most people, including, to judge by their published work, many of its critics. Its realities are relevant to assessing several moral objections to the way contemporary hunters hunt.

Hunting in North America is regulated by the state to ensure the conservation of game and human safety. Open seasons are legally specified by species and weapon. Some are quite brief; the most popular game animal in America is deer (whitetail and mule deer), and in many states the modern gun season is less than two weeks per year (although there are additional seasons for bow and 'primitive' firearms). Some states and counties prohibit the use of rifles altogether, because of the danger posed by their range. Public hunting lands are few and remote in some states, effectively restricting hunting to landowners, their friends, and clients of commercial hunting operations.

Method varies with weapon, habitat, game laws, but above all with the species hunted. Typically, grouse, pheasants, quail and rabbits (upland game) are flushed from grass or brush by a moving hunter (or dog), and shot while fleeing with a cartridge-loaded shotgun (which shoots a cluster of metal pellets or 'shot'). The same weapon is used to take waterfowl in flight, from a blind at water's edge or a stationary boat. Deer, elk and other large herbivores are shot by a modern rifle (long gun with spiral ridge in barrel), muzzle-loading rifle (round and gunpowder loaded separately with a ramrod, also called 'primitive' firearms), slug-loaded shotgun (solid slug instead of cartridge), or bow ('traditional' long or recurve bow, or compound bow, which has cams to decrease the

force necessary to hold at full draw). Some game are stalked (tracking a particular animal), or still-hunted (searching by slowly walking), or awaited in hiding at a fixed position along a game trail (in ground blind or tree stand), or driven (a moving partner scares prey toward a stationary hunter), or vocally called during the mating season. With the exception of coyotes, raccoons and possums, hunting is legally restricted to daylight hours.⁷

Hunting begins with study, that is, practice with gun or bow and learning about prey's habits, sensory capacities and foods. As the season approaches hunters scout hunting areas, especially favoured terrain features, for signs of current movement, feeding and bedding. Often the chances of success are largely determined before the hunt, especially if a fixed tree stand or blind is used. Hunting proper begins when, during legal hours, a legal hunting area is reached where game may appear. It is an act of continual searching. Often this searching is hunting, is the entire experience, because most hunts are unsuccessful. The fact that game animals are commonly seen on roadways, suburban gardens, private property, at night or out-of-season, has little bearing on a hunter's chances. Hunting is limited to hours and places; most prey know when the frequency or character of human presence in their habitat changes, and alter their habits accordingly. Their existence is testament to their genetic and learned expertise in avoiding predators through remaining motionless in heavy cover, occupying terrain features that make undetected approach almost impossible, moving to private property or becoming temporarily nocturnal. Facing the wrong direction in a treestand, slamming a car door, the smell of human sweat or an arm raised to shoo a mosquito can all end the hunter's chance of seeing game for the day. Merely seeing game marks a good day of hunting.

While critics argue that contemporary firearm and bow technologies eliminate fair chase, making hunting too easy, almost all technical advances address convenience, safety and comfort rather than effectiveness. Modern muzzleloaders and compound bows reduce effort, but do little to make the taking of prey more likely.⁸ Only in the use of scoped rifles have technological improvements made a significant difference, because their accuracy at several hundred yards can allow a practised hunter to take game from beyond the prey's sensory range. But this is mainly relevant to hunting large game in unforested, hilly environments; in the woods, or grassy plains, even large game can rarely be seen as much as one hundred yards away. In the field, cartridge-loaded shotguns have an effective range of thirty yards; muzzle-loaders fifty to one hundred yards; slug-loaded shotguns about seventy-five; and compound bows about thirty yards. The average distance at which deer, for example, are taken by firearms is fifty yards; by bow, twenty yards. Rifles and shotguns with magazines permit

follow-up shots; reloading time makes muzzleloaders and bows normally single shot weapons. So, with all these 'improvements', still only about 25 per cent of American deer hunters succeed in taking a deer in a given year.

More fundamentally the criticism misunderstands the challenge of hunting, which is to find a game animal within effective range, when the animal is in a location and bodily orientation that allows a deadly shot that the hunter is in a location and bodily orientation to deliver, before the animal becomes aware of the hunter's location. Hunters do not do that much shooting, because such a position is hard to achieve. A visit to popular hunting grounds in a gun season bears this out; there is typically a fair amount of shooting on opening morning, perhaps (depending on the game) smaller flurries near mid-day and sunset. This pattern may be repeated in lesser quantity on weekends, when the number of hunters may cause game to move. At other times the area will be as quiet as it is out of season, excepting the very occasional, distant report.

The climax of the scouting, searching, and the seeing, is striking game with a deadly projectile. Anti-hunters object to the pain caused by the hunter's strike. Guns kill by massive trauma and shock. Hunting small game with shotguns, any direct hit is likely to be instantly lethal. The same is generally true, or nearly so, for larger game hunted with rifles or slug-loaded shotguns. The hunters' target is usually the heart/lung area or head. If another part of the animal is hit, death can take longer, and a second shot at a moving animal may be required. Arrows are different. They kill by blood loss, denying oxygen to the brain. The time this takes varies widely, depending on the spot hit and the animal's state before being struck. If heart or lungs are hit, death will come in minutes. In fact, modern broadheads (the cutting blades on an arrow) are so sharp the animal may feel only the impact but not the presence of the blades in its body, until it collapses. If the strike has missed heart and lungs, however, bow hunters are unsurprised at having to wait an hour after the stricken animal has run off to find it has bled to death in hiding.

Let us accept that non-instantaneous hunting death involves suffering and/or pain. The question is, how much? Neither hunters nor anti-hunters can answer that question with certainty, but both can, and do, make guesses. It is likely that for animals struck in heart/lung or head by gunshots, and who thus die within moments, shock masks most of the pain, as it would for us. Bow-shot animals who die quickly from the cutting of razor sharp blades also probably feel some, but little, pain. Bow-shot animals who take an hour to bleed to death, even secreted and undisturbed, are certainly suffering in some sense.

Does such a level of pain and suffering make the hunter's strike immoral? What is the criterion of morally

acceptable pain in hunting? Rolston argues that the criterion is the pain of the prey's likely death in the wild from starvation, disease or predation: 'Humans are not bound to inflict no innocent suffering. That is contrary to nature ... No predator can live without causing pain ... The wild animal has no right or welfare claim to have from humans a kinder treatment than in nonhuman nature ... The strong ethical rule is this: Do not cause inordinate suffering, beyond those orders of nature from which the animals were taken' (Rolston 1988: 58–61). We may say that ethically the hunter must strive to inflict the least pain necessary for a successful hunt, but that the suffering is not a moral violation unless it exceeds the pain of the animal's likely wild death. It is difficult to imagine that most forms of natural death – by starvation, disease, expiration in weakened conditions (e.g. in winter, or after injury), and being eaten alive by a predator – involve less pain and suffering than most hunting deaths. The suffering of death-by-hunter likely lies below the level of natural death, but above the nearly painless euthanasia methods today used in the beef industry (which methods, of course, presuppose human control and the prior elimination of the animal's wildness).

The final phase of the hunting act proper is securing or taking possession of the prey. Usually this is straightforward: walking to where the animal fell. As noted, securing is typically more complicated in bowhunting, where even after a successful shot the hunter may need to follow a blood trail to the body. Some prey must be eviscerated in the field by the hunter, and steps taken to preserve the meat. Once home, some hunters butcher their own carcass, some take it to a professional. A trophy may be taken and mounted, hides cured or tanned, meat simply packaged or first processed or smoked, and eventually cooked. All these are ancillary skills of hunting.

The exception to the generally unproblematic nature of securing is the 'wounding' issue, that is, failing to recover mortally stricken prey. Hunters deny its frequency, but it is a significant concern for them; second only to a serious accident to self or other hunters, it is the worst thing that can happen while hunting. Hunters practice to minimize the chance of wounding. How often does non-recovery occur? Bowhunting has been charged with extravagant non-recovery rates, but the most scientific study found that 13 per cent of that minority of bowhunters who actually shot and killed a deer failed to recover it (Krueger 1995).⁹ Such a rate is, I believe, below whatever figure would make the underlying activity immoral. For to claim that an activity can only be morally permissible if it is always successful is to declare it immoral.

A fundamental feature of contemporary hunting is that hunters and hunting organizations claim to follow ethical and legal rules specific to hunting. Critics of hunting find

hunting ethics a contradiction in terms, or even evidence of the immoral nature of the underlying practice (Luke 1997). Certainly the fact that a practice has an ethics does not make it ethical in the sense of showing it ought to be done. But in the case of hunting, its current ethics has additional historical significance. Contemporary North American hunting evolved in the twentieth century in response to the extinction and near extinction of game species by unregulated hunting – especially commercial hunting – in the nineteenth and early twentieth centuries. Hunting nearly obliterated game species in the United States and lower Canada. Most (not all) were re-established by environmentalists and hunting organizations through hard-won legislation which stipulated an end to commercial hunting and a ban on traffic in wild animal products. An integrated system of wildlife management and hunting was established on several key principles: maintenance of species populations near a healthy level as regulated by scientific wildlife management; maintenance of wide opportunities for public hunting open to non-landowners; reservation of un-hunted wild lands to preserve unaffected gene pools; and licensing and taxation of hunters to support all the above (Geist 1995; 2000). The resulting return of game species in the last fifty years, Geist claims, is the greatest environmental success of the twentieth century (Petersen 2003; 2004). The point is, contemporary hunting was re-invented by activists and government in concert with the evolving field of wildlife management to accord with environmental concerns.¹⁰

With this came a revised ethics of hunting, inspired by the three great North American hunter-ecologist-writers of the twentieth century: Aldo Leopold, Paul Shepard and Valerius Geist. As suggested above, neo-traditional hunting is an approximation of the ancient human predatory role in wild nature, understood as the practice of striking individual game with a projectile, its moral context provided by ecological ethics. The hunter must hunt so as to preserve the local prey species for the future ('bag limits'), renounce technical advances that overwhelm the prey's capacities ('fair chase'), and approximate pre-agrarian use of the dead animal (consume prey). Neo-traditional hunting thus has special social and ecological responsibilities that legitimately compromise its approximation of traditional models. It must balance the competing values of: (a) preserving the health of prey species and ecosystems; (b) reasonable likelihood of hunting success; (c) fair chase; (d) causing minimum pain to prey; and (e) human safety.¹¹ The form and methods of neo-traditional hunting will legitimately change as each value alters its demands with social, technological and ecological circumstances.¹²

None of this implies a pristine picture. Hunting is certainly capable of unethical performance, for example, elimination of fair chase or taking shots that invite

wounding. Commercial hunting operations that offer hunters with money but not patience an opportunity on enclosed land with winter-fed deer, nearly 'guaranteeing' a trophy animal, partially domesticate prey. Domestic animals cannot be hunted, by definition. Likewise, killing without utilizing the dead animal is not immoral hunting, it is not hunting at all given that, as I have argued, neo-traditional hunting by nature seeks to approximate archaic hunting practice. Last are those who travel the world to shoot rare game for the sake of international competition. In the words of Theodore Roosevelt: 'any destruction for the sake of making a record, is to be severely reprobated ... the rich ... who are content to buy what they have not the skill to get by their own exertions – these are ... the real enemies of game' (Roosevelt 1926: 269–70). None of these cases resemble the business of the workaday hunter.

As such, hunting plays a crucial role in our current system of wildlife management. Hunters substitute for absent natural predators (primarily wolves, but also cougars) in keeping game populations in check and in supporting wildlands financially. Critics claim that the problem to which hunters are offered as the solution has itself been created for hunters' benefit; that is, deer populations are kept artificially large by wildlife managers for the sake of hunters' dollars through regulations encouraging hunters to take bucks, which has allowed deer herds to exceed carrying capacity, creating a self-maintaining deer 'problem' annually solved by hunting. This criticism is partly correct. However, it speaks not to an end of hunting, but to a change in regulations. Many states are now encouraging the taking of antlerless deer, and doubtless this trend should continue (Petersen 2000: 158–69).

Wildlife management supplies an important moral defense of hunting. Some anticipate chemical contraception for wild deer and other species to circumvent this need for hunting. Only time will tell if such can be practicable, but as Gary Varner has argued, in our current technological state 'the defenders of hunting have it right' (Varner 2003: 103). If without such hunting, species populations and/or ecosystems will suffer great harm, then hunting is necessary, and even the meliorist, hence environmentally sensitive, version of the animal rights/welfare views ought to endorse limited hunting in those circumstances.¹³ However, this argument defends only what Varner calls 'therapeutic' hunting, tailored solely to cull herds. Contemporary hunting does accomplish that aim, but so would deadly culling by professional wildlife managers.¹⁴ The question would then be which method – expert culling or neo-traditional hunting – is most practicable in technological, social and financial terms. Thus the wildlife management argument is a legitimate and important, but limited justification of contemporary hunting.

IV. LEAST HARM: HUNTING VERSUS FARMING

The meliorist animal rights/welfare argument holds that hunting kills animals unnecessarily. This claim hangs on the existence of alternative activities that accomplish hunting's goods or effects with less or no animal killing. As noted, neo-traditional hunting is a return to the archaic pursuit of meat, and contemporary hunting ethics dictates that prey must be eaten. Such nutrition cannot justify hunting, it is claimed, because we have an alternative source of nutrition, agriculture, which does not kill animals. This is indifferently an argument against all meat-eating. Although my aim is not to justify meat-eating in general, any argument to justify hunting for meat will inevitably argue for the morality of meat-eating. For the following inferences are, if not irresistible, yet hard to avoid: if it is wrong for humans to eat meat, then hunting for meat is wrong too; if meat-eating is acceptable, hunting that consumes prey must also be. It would be difficult to argue that an animal suffers more from hunting than from contemporary animal husbandry.¹⁵ Thus, if we may eat domestic cattle, we may eat wild deer; if we may not eat wild deer, we cannot eat domestic cattle either. The point is: by the meliorist principle, hunting (like meat-eating) is immoral because agriculture and vegetarian diets do not kill animals.

Or do they? Jared Diamond once called farming 'the worst mistake in the history of the human race' (Diamond 1987). Although his tongue was in his cheek, he recognized something important. Farming has more radically altered natural environments than any other human activity (with only the very recent possible exception of global warming due to fossil fuel use). It razes woodlands and prairies and diverts waterways to create artificial biotic systems requiring vigilant intervention to prevent re-colonisation by the wild environment.

Farming harms or kills wild animals in at least five ways. First, clearing land kills animals outright and destroys habitat, hence causes starvation or disruption of reproduction. Second, modern intensive agriculture uses pesticide and nitrogenous fertilizer whose run-off pollutes ground water on which animals depend. Third, modern farming uses machinery to break through the soil, and in each passage ground-nesting amphibians, reptiles, birds and small mammals are maimed or killed. Fourth, crops must be protected from opportunistic wildlife. Richard Nelson, tracking farmers who routinely kill deer to save crops, claims that 'Whenever any of us sit down for breakfast, lunch, dinner, or a snack, it's likely that deer were killed to protect some of the food we eat and the beverages we drink' (Nelson 1997: 310). Fifth are a host of indirect harms by modern agriculture's supporting technologies. Vegetable nutrition is wrung from the Earth

by diesel-burning machinery and nitrogen- and oil-based fertilizers, processed and refrigerated with power from river-altering, coal-burning or nuclear-waste-producing plants, driven thousands of miles over asphalt by fossil-fueled trucks.

The meliorist animal rights/welfare view must take into account that agriculture kills animals. Hence, so does a vegetarian diet. We now see that hunting must be judged not only relative to the animals hunting kills, but relative to the animal cost of the agrarian activity that would replace the meat from the animals it kills. Where a type of hunting has a lower death/nutrition ratio than a type of farming, and where the pain of death by hunter is arguably no greater than death by farmer, the meliorist version of the animal welfare/animal rights argument must morally prefer hunting to farming.

Comprehensive data on wildlife deaths by farming are lacking. The comparison of the animal death/nutrition ratio for farming and hunting will vary, on the farming side, according to crop yield, climate, level of technological intensity, distance from market, etc., and, on the hunting side, with the species and size of animal hunted. All we can do here is to note two comparisons based on two of agriculture's potential harms to wildlife.

Regarding fossil fuel use, Ted Kerasote, using data from David Pimentel, analyzed the fossil fuel costs of killing one elk near his Wyoming home versus the same calories of produce (Kerasote 1993: 234ff). The 150 pounds of meat from one elk cost 79,000 kilocalories of fossil fuel energy in producing his gun and ammunition, driving to the field, etc. The caloric equivalent in store bought potatoes cost 151,000 kilocalories; rice and canned beans cost 477,000 kilocalories. Organically growing the 360 pounds of potatoes locally, on .02 hectares, would cost 42,000 kilocalories in seed and other requirements. So, considering fossil fuel use alone, local organic-sustainable farming did undercut the elk meat, although any non-local or processed produce was far more costly. That is, *ceteris paribus*, local organic-sustainable farmed vegetable nutrition may be less harmful than locally hunted animal nutrition, but locally hunted animal nutrition was far less harmful than industrially or non-locally farmed vegetable nutrition.

Let us consider the animals killed by farm machinery. In a widely noted essay, Steven Davis argued against universal vegetarianism by claiming that agriculture might produce less nutrition per animal death than animal husbandry, using a figure of 15 animal deaths per hectare from farm machinery (Davis 2003). Davis's argument has been criticized for failing to take into account the nutritional inefficiency of growing animal feed (Matheny 2003). Although valid with respect to feed-lot animals, this criticism would not hold for hunted wild animals or animals pastured on un-arable land.¹⁶ But what matters in the present context is Davis's estimate of farm-machinery

caused animal deaths. This was generated from two prior studies that each counted deaths of one species of rodent for one passage of harvesting machinery across the fields. Davis averaged the two mortality rates (yielding 60 per cent) and applied it only to the mice population from one of the studies (24/ha). Thus, 15 per hectare is the number of one species of rodent killed by one machinery pass over the fields, ignoring all other species and machinery passages, e.g. ploughing, harrowing, cultivating, planting, fertilizing, etc.

The USDA lists venison at 130 grams of protein per pound. A 150-pound deer yields about 60 pounds of meat, hence around 8,000 grams of quality protein with very little fat. Modern intensive agriculture can produce more than a ton of soybeans per hectare, hence, at 34 per cent protein by weight, 370,000 grams of protein (although it must be processed, unlike venison). Thus, to equal deer hunting in protein per death, the deaths of all mammals, birds, amphibians and reptiles for all passages of farm machinery over that one hectare of soybeans would have to be no more than 45, or just 30 more than Davis's one rodent species killed by one machinery passage. That would be hard to believe. We must imagine that the one machinery pass calculated over all resident vertebrates might well exceed 45. Then there are the several other machinery passes over the growing season. Then there are the four other farming impacts: habitat loss, crop protection, pesticide/fertilizer run-off, fossil-fuel effects. Thus, while precise data are lacking, if Davis's figure is even remotely accurate, it is very likely that agricultural production kills more animals than deer hunting per unit of nutrition, hence must kill more animals for the same meal. And in terms of animal suffering, it would be difficult to show that death from being maimed, crushed, cut to pieces, poisoned or starved is less painful than the average death by hunter as described in the preceding section.

As for local organic-sustainable farming, it undoubtedly harms wildlife less per hectare than intensive farming with respect to pesticide/fertilizer use, and presumably less regarding machinery passes and indirect effects of transportation/refrigeration, but it may not with respect to habitat loss and crop protection. Indeed, because its efficiency of production is inevitably lower than that of intensive agriculture, there is a possibly off-setting downward pressure on its nutrition per animal death, requiring more acreage to be put into production to achieve the same nutrition. Whether this prevents it from undercutting hunting's nutrition/death ratio is unclear.

Now, it might be argued that the agrarian killing of animals is unintended, hence moral, or less immoral than the hunter's intended killing. The role of intent, or better, purposiveness in the harm of non-humans is an interesting moral question that cannot be adequately addressed here. But it should be noted that such an

argument would undermine much of both animal rights/welfare views and ecological ethics, whose contribution to ethical treatment of non-human creatures calls attention to unintended effects. Do we really want to say that unintended – more precisely, ‘unsought’ – animal deaths predictably caused by an act or policy are not to count against it morally? In some animal experimentation death is not sought but is a predictable by-product. Are we to say that a greater anticipated but unsought harm to animals is morally preferable to a lesser but sought harm? Legislation against habitat destruction is morally based on not making that distinction.¹⁷

Thus, at least some forms of hunting are very probably less deadly to animals than farming and the vegetarian diets depending on it. Remember that the meliorist version of the animal rights/welfare views, which is compatible with ecological ethics, holds that humanly caused animal death and suffering should be reduced as much as possible, hence allowed only if necessary. Eating is a necessity. Consequently, in those cases where ethical hunts kill fewer animals for the same nutrition than do farming and vegetarianism, eating hunted meat would be not only morally justified but morally preferred. The lesson is that there is virtually no free lunch, that is, free of moral culpability for animal death. Whatever answer we can give to the ‘triangulated’ moral argument between vegetarianism, animal husbandry and hunting as to their respective animal harms, it will be complex, circumstantial and a matter of degree. The mantle of least harm will shift among particular types and circumstances of farming or hunting, or pasturing, each with its own animal cost.

V. DOES HUNTING EMBODY GOODS?

Even if hunting is morally permissible, or not immoral, is there anything good about it? Ethically regulated hunting arguably manifests virtues, of which a few can be mentioned. First, like home brewers, vegetable gardeners and amateur wood-workers hunters achieve anachronistic self-sufficiency. As Leopold said of ‘hobbies’, the attempt to maintain pre-modern skills that are markedly less efficient than contemporary modes of production or acquisition, is valuable (Leopold 1970). Hunting shares with raising your own produce some virtue not embodied in buying produce at the store. Second, this self-sufficiency manifests what we could call trophic responsibility. Ignorance of food is ignorance of our most basic relation to nature. What Michael Pollan calls ‘facing your food’ is, particularly in contemporary society, an ecological virtue (Pollan 2002). Hunters face the animal they are to eat in its natural life, they see the wild life it loses when it dies, personally kill and eviscerate it, and sometimes butcher it themselves.

Hunting is a personally responsible form of human carnivory. Third, is local ecological expertise. Hunters’ ability to find game rests on their knowledge of local habitats and species. Long-time hunters typically become experts on their hunting grounds; hunters commonly receive queries from government agencies about non-game species of concern. They are one of the few non-professional groups that routinely canvas local wild habitats off-trail and in harsh weather.

It is an historical fact that hunting has carried special meaning for its practitioners and their societies. As Paul Shepard points out, hunting had metaphysical significance for most pre-agrarian, pre-literate peoples, which is to say, for all of us until five to ten thousand years ago (Shepard 1973). In their ecological cosmologies the predator–prey relation was conceived as a moral relationship. Animal food was not a what but a revered and mysterious who, pursuable only by the discerning seeker, a who that dies and becomes the seeker, transforming the latter in the process. This was understood as an exchange in which the human provided the animal respect and thanks, a cultural immortality, and a predatory limit on species populations, while the animal provided humans food and a lesson in the secrets of reality. In evolutionary terms, the hunter, like any predator, serves prey as a messenger of the genetic information that constitutes its species’ future; for while the predator uses the prey, it is equally true that the prey-species uses the predator and the ecosystem uses them both (Shepard 1996: 24).¹⁸

Although modern agro-industrial hunters are not animists, they do engage that archaic practice. Hunting renews their membership both in our archaic human lineage and in the animal sphere. Hunting alone plunges us into the wild on wild business, to pursue our existence by its rules, where every life lives at the expense of others, which is the bargain of animal existence. As Rolston writes, ‘In ways that mere watchers of nature can never know, hunters know their ecology. The hunter’s success is not conquest but submission to the ecology ...’ (Rolston 1988: 92). Or as Kerasote puts it, ‘The elk in the forest, the myriad of small creatures lost as the combines turn the fields, and the Douglas fir hidden in the walls of our homes – every day we foreclose one life over another ... Given this condition and my final inability to escape from it, I decided to go back to hunting ... because it attaches me to this place and the animals I love, asking me to own what each of us ought to own in some personal way – the pain that runs the world ...’ (Kerasote 1993: 240) This is less romance, or animism, than a kind of animal honesty. And that may be the virtue most reliably embodied by hunting.

The critic of hunting, left cold by such claims, is likely to say that even if pain ‘runs the world’, that is no justification for choosing to add to it. True enough. But,

as argued, much contemporary hunting does not add to but replaces some part of the massive, anonymous animal suffering caused unseen by consumers, omnivores and vegetarians, with pain caused personally and directly, in which the animal's life and death are intimately recognised and responsibility taken. If so, then in a modern society where both meat-eaters and vegetarians are ever more distant from the trophic sources of their existence, it is arguably good that some choose temporarily to return to the archaic practice, common to many animals and essential to their ecosystems, so that participatory awareness of the way life uses death in animal nature does not vanish from human society.

CONCLUSION

We may summarize. Contemporary hunting is not a sport; it is a neo-traditional cultural practice in which contemporaries re-enter an archaic pursuit of meat. Wild animal death by hunter is on average less painful than death by farmer or by nature, and while more painful than death by enlightened animal husbandry, death by hunter allows the animal its wild life. Regulated, ethical hunting embodies the goods of trophic responsibility, ecosystem expertise, anachronistic self-sufficiency, a rare experience of animal inter-dependence, and a kind of honesty. Whether or not one credits those goods as balancing the animal lives it takes, hunting must still be moral wherever either of two conditions hold: (a) preservation of species or ecosystems requires neo-traditional hunting as the only viable wildlife management tool; or (b) the animal cost of farming per unit of nutrition is equal to or greater than that of hunting. These conditions obtain at least some of the time.

NOTES

¹ This paper has benefited from the criticism of Elizabeth Baeten, Phil Cafaro, Valerius Geist, Holmes Rolston and George White, the most skilled and ethical hunter I know.

² The holism can be variously conceived, e.g. biocentrically (Rolston 1988), anthropocentrically (Norton 1984; 1987), or in a communitarian fashion (Callicott 1989; 1998).

³ I am not addressing forms of hunting where prey is not consumed, e.g. English fox hunting (Scruton 2001) or indigenous ritualised hunts (Aaltola and Okasanen 2002).

⁴ J. Claude Evans, in his book on the ecological ethics of hunting and fishing, quotes his own father's published analysis of the 'decline' of hunting in America. As J. Claude Evans Sr. put it, 'We grew up when hunting was a food-producing skill, and lived through its moving into a sport' (Evans 2005: xxi).

⁵ As Rolston puts it, 'In this sense, hunting is not sport; it is a sacrament of the fundamental, mandatory seeking and taking possession of value that characterizes an ecosystem and from which no culture ever escapes' (Rolston 1988: 91).

⁶ Varner distinguishes hunting to protect ecosystems ('therapeutic' hunting), from 'subsistence' hunting for food, and from sport/cultural hunting 'aimed at maintaining religious or cultural traditions, reenacting national or evolutionary history, honing certain skills or just securing a trophy' (Varner 2003: 98). His third category recognises the cultural nature of hunting, which he rightly says can equally apply to Inuit hunters and 'hill country Texans'. What is less right is that, as he admits but does not explore, contemporary hunting overlaps all three, being in principle a combination of cultural hunting for meat regulated by wildlife-ecosystem management.

⁷ As noted, I am not attempting to justify hunting where game is not consumed.

⁸ Compound bows are much less demanding on the skill of the archer and achieve much higher arrow speed, but, given the intrinsic inefficiency of bowhunting, one suspects their main impacts are to put more archers in the field and to reduce wounding.

⁹ Krueger's study supplemented the usual surveys of hunter self-reports with infrared scanning by helicopter, ground recovery of downed deer, and autopsies. Her findings show that wounding estimates based solely on hunters' self-reports greatly inflate the number of wounded deer.

¹⁰ Hunting is one of the few activities in modern society in which killing of un-endangered species is regulated. Nobody is fined or jailed for killing wild animals by backhoe, combine or sedan.

¹¹ Notice that fair chase and minimal suffering can conflict; reducing the hunter's probability of success can increase the possibility of wounding. The goal is to balance the right kind of inefficiency – the challenge of achieving a makeable shot opportunity – with the right kind of efficiency – shots resulting in a quick death.

¹² Hunters' ethical self-restrictions have been used to critique hunting. 'The sportsman's code raises an unmet moral case against hunting', Luke writes, 'The only moral choice left is to renounce hunting as such' (Luke 1997: 43). Luke's argument is not merely that hunting ethics fails to justify the ethics of hunting – which is true – it is that the need for ethical restraints reveals the immoral nature of the activity. Well, sex is subjected to ethical restrictions in most cultures. Do such codes, accepted by the practitioners of sex, raise an 'unmet moral case' against sex? Is the only moral choice to renounce sex as such?

¹³ For one account of hunting and deer overpopulation, see Dizard 1994.

¹⁴ Varner imagines hunting confined to bait stations where hunters wait with high-powered rifles. Since he does not consider any benefits of neo-traditional hunting other than wildlife management, he naturally defends a hunting that could as easily, and more efficiently, be performed by paid government agents.

¹⁵ Regarding modern, high-density animal husbandry, the case is unarguable. Regarding low-density pasturing the case is less clear, but even here the animal is deprived of its wild life and species-characteristic behaviours (cf. note 16).

¹⁶ While my brief for hunting need not defend animal husbandry, it is noteworthy that the argument that animal husbandry is not only cruel but wasteful compared to eating the plants the animals eat (e.g. see Waggoner 1994) only applies to land that could grow humanly edible crops. Traditionally pastoralism drew human nutrition from the grasses of land too dry or hilly for farming. Modern crowded feedlots, and worse, confined animal feeding operations, cause stress, disease and impede species-characteristic behaviours, hence are arguably immoral in their treatment of animals. But pasturing animals at low density may escape the animal rights/welfare critique, as Singer himself seems to have recognised (Singer 2002b).

¹⁷ One might suggest (as an anonymous reader of this essay did suggest) that the law of double effect might be used to defend farming's unsought killing of animals (this excludes crop-protection kills). But double effect is a two-edged sword. In its historical home in just war theory the doctrine serves to say that when I bomb a factory, the deaths of the children in the school next door – which I anticipated but did not seek – do not make my act immoral. But in just war theory that doctrine was supplemented by others, notably proportionality, which rules out disproportionate harm whether or not it is purposively sought. So the anticipated deaths of the children, not immoral under double-effect, could still make the bombing immoral if the total harm caused is disproportionately high relative to the good it achieves (e.g. hastening an end to the war). Double-effect by itself may not be salutary in animal treatment or environmental ethics.

¹⁸ The individual dies but the species lives. Roger Scruton is probably right that the totemic hunter did not make a strict distinction between the individual and the species – hence the spirit of the prey continues in the species (see Shepard's example, from the Haida people, 1985, pp. 58–9) – whereas we do. Theirs may have been sloppy metaphysics, but it was fairly accurate ecology. However, with Shepard, I think Scruton wrong in claiming hunting, archaic or contemporary, is sacrificial (Scruton 1997: 477).

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